

- 1. A method is disclosed for separating a polypeptide monomer from a mixture comprising dimers or multimers or both, wherein the method comprises applying the mixture to a cation-exchange or anion-exchange chromatography resin in a buffer, wherein if the resin is cation-exchange, the pH of the buffer is about 4-7, and wherein if the resin is anion-exchange, the pH of the buffer is about 6-9, and eluting the mixture at a gradient of about 0-1 M of an elution salt, wherein the monomer is separated from the dimers or multimers or both present in the mixture.
- 2. The method of claim 1 wherein the polypeptide is an antibody or a serum albumin.
- 3. The method of claim 2 wherein the antibody is anti-IgE, anti-IgG, anti-Her-2, anti-CD11a, anti-CD18, anti-CD20, or anti-VEGF.
- 4. The method of claim 2 wherein the serum albumin is bovine serum albumin.
- 5. The method of claim 1 wherein the ion-exchange resin is a cation-exchange resin.
- 6. The method of claim 1 wherein the ion-exchange resin is an anion-exchange resin.
- 7. The method of claim 1 wherein the gradient is linear.
- 8. The method of claim 1 wherein the gradient is stepwise.
- 9. The method of claim 1 wherein the elution salt is a sodium salt.
- 10. The method of claim 9 wherein the elution salt is sodium chloride.
- 11. The method of claim 1 wherein the gradient is from 0 to 500 mM elution salt.

- 12. The method of claim 1 wherein the gradient is from 50 to 200 mM elution salt.
- 13. The method of claim 1 wherein the gradient is from 0 to 50 mM elution salt.

